6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R08-OAR-2018-0606; FRL-9984-85-Region 8]

Approval and Promulgation of Air Quality Implementation Plans; Wyoming; Revisions to

Regional Haze State Implementation Plan; Revisions to Regional Haze Federal

Implementation Plan

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve a State

Implementation Plan (SIP) revision submitted by the State of Wyoming on April 5, 2018,

addressing regional haze. The revisions modify the sulfur dioxide (SO<sub>2</sub>) emissions reporting

requirements for Laramie River Station Units 1 and 2. We are also proposing to revise the

nitrogen oxides (NO<sub>x</sub>) best available retrofit technology (BART) emission limits for Laramie

River Units 1-3 in the Federal Implementation Plan (FIP) for regional haze in Wyoming. The

proposed revisions to the Wyoming regional haze FIP would also establish a SO<sub>2</sub> emission limit

averaged annually across both Laramie River Station Units 1 and 2. The EPA is proposing this

action pursuant to section 110 of the Clean Air Act (CAA).

**DATES**: Comments: Written comments must be received on or before [INSERT DATE 30]

DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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Public Hearing: If anyone contacts us requesting a public hearing on or before [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], we will hold a hearing. Additional information about the hearing, if requested, will be published in a subsequent Federal Register document. Contact Jaslyn Dobrahner at (303) 312-6252, or at dobrahner.jaslyn@epa.gov, to request a hearing or to determine if a hearing will be held. ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R08-OAR-2018-0606, to the Federal Rulemaking Portal: https://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from www.regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www.epa.gov/dockets/commenting-epa-dockets.

Docket: All documents in the docket are listed in the www.regulations.gov index.

Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in www.regulations.gov or in hard copy at the Air Program,

Environmental Protection Agency (EPA), Region 8, 1595 Wynkoop Street, Denver, Colorado 80202-1129. The EPA requests that, if at all possible, you contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 8:00 a.m. to 4:00 p.m., excluding federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Jaslyn Dobrahner, Air Program, EPA, Region 8, Mailcode 8P-AR, 1595 Wynkoop Street, Denver, Colorado, 80202-1129, (303) 312-6252, dobrahner.jaslyn@epa.gov.

**SUPPLEMENTARY INFORMATION:** Throughout this document wherever "we," "us," or "our" is used, we mean the EPA.

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# I. What Action is the EPA Proposing?

On January 30, 2014, the EPA promulgated a final rule titled "Approval, Disapproval and Promulgation of Implementation Plans; State of Wyoming; Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze" approving, in part, a regional haze SIP revision submitted by the State of Wyoming on January 12, 2011. In the final rule, the EPA also disapproved, in part, the Wyoming regional haze SIP, including the NO<sub>x</sub> BART emission limit of 0.21 lb/MMBtu (30-day rolling average) for Laramie River Units 1-3, and promulgated a FIP that imposed a NO<sub>x</sub> BART emission limit of 0.07 lb/MMBtu (30-day rolling average) for each of the three Laramie River Units, among other actions.

The EPA is proposing to revise the FIP per the terms of the settlement agreement and amendment described in Section II.G. to amend the  $NO_x$  and  $SO_2$  emission limits for Laramie

<sup>&</sup>lt;sup>1</sup> 79 FR 5032 (January 30, 2014).

River. Specifically, the EPA is proposing to: 1) Revise the NO<sub>x</sub> emission limit and associated compliance date for Unit 1; 2) through the incorporation of a BART alternative, revise the NO<sub>x</sub> emission limits for Units 2 and 3, and the SO<sub>2</sub> emission limit averaged annually across Units 1 and 2 along with the associated compliance dates; and 3) require selective catalytic reduction (SCR) on Unit 1 and selective non-catalytic reduction (SNCR) on Units 2 and 3. Although we are proposing to revise the Wyoming regional haze FIP, Wyoming may always submit a new regional haze SIP to the EPA for review and we would welcome such a submission. The CAA requires the EPA to act within 12 months on a SIP submittal that it determines to be complete. If Wyoming were to submit a SIP revision meeting the requirements of the CAA and the regional haze regulations, we would propose approval of the State's plan as expeditiously as practicable.

The EPA is also proposing to approve SIP revisions submitted by the State of Wyoming on April 5, 2018, to amend the SO<sub>2</sub> emissions reporting requirements for Laramie River Units 1 and 2. Specifically, the EPA is proposing to approve the SO<sub>2</sub> emissions reporting requirements for Laramie River Units 1 and 2, which address how Basin Electric is required to calculate reportable SO<sub>2</sub> emissions, when Basin Electric is required to use the revised SO<sub>2</sub> emissions calculation method, and how the reported SO<sub>2</sub> emissions will be used within the context of the SO<sub>2</sub> emissions milestone inventory.

### II. Background

#### A. Requirements of the Clean Air Act and the EPA's Regional Haze Rule

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes "as a national goal the prevention of any future, and the remedying of any existing,

impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution."<sup>2</sup>

The EPA promulgated a rule to address regional haze on July 1, 1999.<sup>3</sup> The Regional Haze Rule (RHR) revised the existing visibility regulations<sup>4</sup> to integrate provisions addressing regional haze and established a comprehensive visibility protection program for Class I areas. The requirements for regional haze, found at 40 CFR 51.308 and 40 CFR 51.309, are included in the EPA's visibility protection regulations at 40 CFR 51.300 through 40 CFR 51.309. The EPA revised the RHR on January 10, 2017.<sup>5</sup>

The CAA requires each state to develop a SIP to meet various air quality requirements, including protection of visibility.<sup>6</sup> Regional haze SIPs must assure reasonable progress toward the national goal of achieving natural visibility conditions in Class I areas. A state must submit its SIP and SIP revisions to the EPA for approval. Once approved, a SIP is enforceable by the EPA and citizens under the CAA; that is, the SIP is federally enforceable. If a state elects not to make a required SIP submittal, fails to make a required SIP submittal or if we find that a state's

<sup>&</sup>lt;sup>2</sup> 42 U.S.C. 7491(a). Areas designated as mandatory Class I Federal areas consist of national parks exceeding 6000 acres, wilderness areas and national memorial parks exceeding 5000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). In accordance with section 169A of the CAA, EPA, in consultation with the Department of Interior, promulgated a list of 156 areas where visibility is identified as an important value. 44 FR 69122 (November 30, 1979). The extent of a mandatory Class I area includes subsequent changes in boundaries, such as park expansions. 42 U.S.C. 7472(a). Although states and tribes may designate as Class I additional areas whose visibility they consider to be an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to "mandatory Class I Federal areas." Each mandatory Class I Federal area is the responsibility of a "Federal Land Manager." 42 U.S.C. 7602(i). When we use the term "Class I area" in this section, we mean a "mandatory Class I Federal area."

<sup>&</sup>lt;sup>3</sup> 64 FR 35714, 35714 (July 1, 1999) (codified at 40 CFR part 51, subpart P).

<sup>&</sup>lt;sup>4</sup> The EPA had previously promulgated regulations to address visibility impairment in Class I areas that is "reasonably attributable" to a single source or small group of sources, i.e., reasonably attributable visibility impairment (RAVI). 45 FR 80084, 80084 (December 2, 1980).

<sup>&</sup>lt;sup>5</sup> 82 FR 3078 (January 10, 2017).

<sup>&</sup>lt;sup>6</sup> 42 U.S.C. 7410(a), 7491, and 7492(a); CAA sections 110(a), 169A, and 169B.

required submittal is incomplete or not approvable, then we must promulgate a FIP to fill this regulatory gap.<sup>7</sup>

### B. Best Available Retrofit Technology (BART)

Section 169A of the CAA directs states as part of their SIPs, or the EPA when developing a FIP in the absence of an approved regional haze SIP, to evaluate the use of retrofit controls at certain larger, often uncontrolled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires states' implementation plans to contain such measures as may be necessary to make reasonable progress toward the natural visibility goal, including a requirement that certain categories of existing major stationary sources built between 1962 and 1977 procure, install, and operate the "Best Available Retrofit Technology" as determined by the states through their SIPs, or as determined by the EPA when it promulgated a FIP. Under the RHR, states (or the EPA) are directed to conduct BART determinations for such "BART-eligible" sources that may reasonably be anticipated to cause or contribute to any visibility impairment in a Class I area. Rather than requiring source-specific BART controls, states also have the flexibility to adopt an emissions trading program or other alternative program as long as the alternative provides greater reasonable progress towards improving visibility than BART.

<sup>&</sup>lt;sup>7</sup> 42 U.S.C. 7410(c)(1).

<sup>&</sup>lt;sup>8</sup> 40 CFR 51.308(e). The EPA designed the Guidelines for BART Determinations Under the Regional Haze Rule (Guidelines) 40 CFR appendix Y to part 51 "to help States and others (1) identify those sources that must comply with the BART requirement, and (2) determine the level of control technology that represents BART for each source." Guidelines, Section I.A. Section II of the Guidelines describes the four steps to identify BART sources, and Section III explains how to identify BART sources (i.e., sources that are "subject to BART").

<sup>9</sup> 40 CFR 51.308(e)(2). WildEarth Guardians v. EPA, 770 F.3d 919 (10th Cir. 2014).

### C. BART Alternatives

An alternative program to BART must meet requirements under 40 CFR 51.308(e)(2) and (e)(3). These requirements for alternative programs relate to the "better-than-BART" test and fundamental elements of any alternative program.

In order to demonstrate that the alternative program achieves greater reasonable progress than source-specific BART, a state, or the EPA if developing a FIP, must demonstrate that its SIP meets the requirements in 40 CFR 51.308(e)(2)(i) through (v). The state or the EPA must conduct an analysis of the best system of continuous emission control technology available and the associated reductions for each source subject to BART covered by the alternative program, termed a "BART benchmark." Where the alternative program has been designed to meet requirements other than BART, simplifying assumptions may be used to establish a BART benchmark.

Pursuant to 40 CFR 51.308(e)(2)(i)(E), the state or the EPA, must also provide a determination that the alternative program achieves greater reasonable progress than BART under 40 CFR 51.308(e)(3) or otherwise based on the clear weight of evidence. 40 CFR 51.308(e)(3), in turn, provides specific tests applicable under specific circumstances for determining whether the alternative achieves greater reasonable progress than BART. If the distribution of emissions for the alternative program is not substantially different than for BART, and the alternative program results in greater emissions reductions, then the alternative program may be deemed to achieve greater reasonable progress. If the distribution of emissions is significantly different, the differences in visibility between BART and the alternative program, must be determined by conducting dispersion modeling for each impacted Class I area for the best and worst 20 percent of days. This modeling demonstrates "greater reasonable progress" if

both of the two following criteria are met: (1) Visibility does not decline in any Class I area; and (2) there is overall improvement in visibility when comparing the average differences between BART and the alternative program across all the affected Class I areas. Alternatively, pursuant to 40 CFR 51.308(e)(2), states may show that the alternative achieves greater reasonable progress than the BART benchmark "based on the clear weight of evidence" determinations. Specific RHR requirements for alternative programs are discussed in more detail in Section III. 10

Generally, a SIP or FIP addressing regional haze must include emission limits and compliance schedules for each source subject to BART. In addition to the RHR's requirements, general SIP requirements mandate that the SIP or FIP include all regulatory requirements related to monitoring, recordkeeping, and reporting for the alternative's enforceable requirements. See CAA section 110(a); 40 CFR part 51, subpart K.

#### D. Reasonable Progress Requirements

In addition to BART requirements, as mentioned previously, each regional haze SIP or FIP must contain measures as necessary to make reasonable progress towards the national visibility goal. Finally, the SIP or FIP must establish reasonable progress goals (RPGs) for each Class I area within the state for the plan implementation period (or "planning period"), based on the measures included in the long-term strategy. 11 If an RPG provides for a slower rate of improvement in visibility than the rate under which the national goal of no anthropogenic visibility impact would be attained by 2064, the SIP or FIP must demonstrate, based on the four

<sup>&</sup>lt;sup>10</sup> 40 CFR 51.308(e)(2). <sup>11</sup> 40 CFR 51.308(d).

reasonable progress factors, why that faster rate is not reasonable and the slower rate provided for by the SIP or FIP's state-specific RPG is reasonable.<sup>12</sup>

# E. Consultation with Federal Land Managers (FLMs)

The RHR requires that a state, or the EPA if promulgating a FIP that fills a gap in the SIP with respect to this requirement, consult with FLMs before adopting and submitting a required SIP or SIP revision, or a required FIP or FIP revision. Further, the EPA, or state when considering a SIP revision, must include in its proposal a description of how it addressed any comments provided by the FLMs.

## F. Requirements for Regional Haze SIPs Submitted Under 40 CFR 51.309

The EPA's RHR provides two paths to address regional haze. One is 40 CFR 51.308, requiring states to perform individual point source BART determinations and evaluate the need for other control strategies. The other method for addressing regional haze is through 40 CFR 51.309, and is an option for nine states termed the "Transport Region States," which include: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah and Wyoming. By meeting the requirements under 40 CFR 51.309, a Transport Region State can be deemed to be making reasonable progress toward the national goal of achieving natural visibility conditions for the 16 Class I areas on the Colorado Plateau.<sup>14</sup>

<sup>&</sup>lt;sup>12</sup> 40 CFR 51.308(d)(1)(ii).

<sup>&</sup>lt;sup>13</sup> 40 CFR 51.308(i).

<sup>&</sup>lt;sup>14</sup> The Colorado Plateau is a high, semi-arid tableland in southeast Utah, northern Arizona, northwest New Mexico, and western Colorado. The 16 mandatory Class I areas are: Grand Canyon National Park, Mount Baldy Wilderness, Petrified Forest National Park, Sycamore Canyon Wilderness, Black Canyon of the Gunnison National Park Wilderness, Flat Tops Wilderness, Maroon Bells Wilderness, Mesa Verde National Park, Weminuche Wilderness, West Elk Wilderness, San Pedro Park Wilderness, Arches National Park, Bryce Canyon National Park, Canyonlands National Park, Capital Reef National Park and Zion National Park.

Section 309 requires those Transport Region States that choose to participate to adopt regional haze strategies that are based on recommendations from the Grand Canyon Visibility Transport Commission (GCVTC) for protecting the 16 Class I areas on the Colorado Plateau. The purpose of the GCVTC was to assess information about the adverse impacts on visibility in and around the 16 Class I areas on the Colorado Plateau and to provide policy recommendations to the EPA to address such impacts. The GCVTC determined that all Transport Region States could potentially impact the Class I areas on the Colorado Plateau. The GCVTC submitted a report to the EPA in 1996 for protecting visibility for the Class I areas on the Colorado Plateau, and the EPA codified these recommendations as an option available to states as part of the RHR.<sup>15</sup>

The EPA determined that the GCVTC strategies would provide for reasonable progress in mitigating regional haze if supplemented by an annex containing quantitative emission reduction milestones and provisions for a trading program or other alternative measure. 16 In September 2000, the Western Regional Air Partnership (WRAP), which is the successor organization to the GCVTC, submitted an annex to EPA. The annex contained SO<sub>2</sub> emissions reduction milestones and detailed provisions of a backstop trading program to be implemented automatically if voluntary measures failed to achieve the SO<sub>2</sub> milestones. The EPA codified the annex on June 5, 2003 at 40 CFR 51.309(h).<sup>17</sup>

 <sup>64</sup> FR 35714, 35749 (July 1, 1999).
 64 FR 35714, 35749, 35756 (July 1, 1999).
 68 FR 33764, 33767 (June 5, 2003).

Five western states, including Wyoming, submitted implementation plans under section 309 in 2003. <sup>18</sup> The EPA was challenged by the Center for Energy and Economic Development (CEED) on the validity of the annex provisions. In *CEED* v. *EPA*, the DC Circuit Court of Appeals vacated the EPA approval of the WRAP annex. <sup>19</sup> In response to the court's decision, the EPA vacated the annex requirements adopted under 40 CFR 51.309(h), but left in place the stationary source requirements in 40 CFR 51.309(d)(4). <sup>20</sup> The requirements under 40 CFR 51.309(d)(4) contain general requirements pertaining to stationary sources and market trading, and allow states to adopt alternatives to the point source application of BART.

Thus, rather than requiring source-specific BART controls as explained previously in Section II.B., states have the flexibility to adopt an emissions trading program or other alternative program if the alternative provides greater reasonable progress than would be achieved by the application of BART pursuant to 40 CFR 51.308(e)(2). Under 40 CFR 51.309, states can satisfy the SO<sub>2</sub> BART requirements by adopting SO<sub>2</sub> emissions milestones and a backstop trading program. Under this approach, states must establish declining SO<sub>2</sub> emissions milestones for each year of the program through 2018. The milestones must be consistent with the GCVTC's goal of 50 to 70 percent reduction in SO<sub>2</sub> emissions by 2040. The backstop trading program would be implemented if a milestone is exceeded and the program is triggered.<sup>21</sup>

G. Regulatory and Legal History of the 2014 Wyoming SIP and FIP

<sup>&</sup>lt;sup>18</sup> Five states – Arizona, New Mexico, Oregon, Utah and Wyoming – and Albuquerque-Bernalillo County, New Mexico, initially exercised this option by submitting plans to the EPA in December 2003. Oregon elected to cease participation in 2006, and Arizona elected to cease participation in 2010.

<sup>&</sup>lt;sup>19</sup> Ctr. for Energy & Econ. Dev. v. EPA, 398 F.3d 653, 654 (D.C. Cir. 2005).

<sup>&</sup>lt;sup>20</sup> 71 FR 60612 (October 13, 2006).

<sup>&</sup>lt;sup>21</sup> 40 CFR 51.309(d)(4)(v).

On January 30, 2014, the EPA promulgated a final rule titled "Approval, Disapproval and Promulgation of Implementation Plans; State of Wyoming; Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze" approving, in part, a regional haze SIP revision submitted by the State of Wyoming on January 12, 2011. In the final rule, the EPA also disapproved, in part, the Wyoming regional haze SIP, including the SIP NO<sub>x</sub> BART emission limit of 0.21 lb/MMBtu (30-day rolling average) for each of the three Laramie River Units, and promulgated a FIP that imposed a NO<sub>x</sub> BART emission limit of 0.07 lb/MMBtu (30-day rolling average) at each of the three Laramie River Units, among other actions. The Laramie River Station is in Platte County, Wyoming, and is comprised of three 550 megawatt (MW) drybottom, wall-fired boilers (Units 1, 2, and 3) burning subbituminous coal for a total net generating capacity of 1,650 MW. All three units are within the statutory definition of BART-eligible units, were determined to be subject to BART by WY, approved in the SIP and are operated by, and owned in part by, Basin Electric Power Cooperative (Basin Electric).

Basin Electric, the State of Wyoming, and others challenged the final rule. Basin Electric challenged our action as it pertained to the NO<sub>x</sub> BART emission limits for Laramie River Units 1-3.<sup>23</sup> After mediated discussions through the U.S. Court of Appeals for the Tenth Circuit's Mediation Office, Basin Electric, Wyoming and the EPA reached a settlement in 2017 that if fully implemented, would address all of Basin Electric's challenges to the 2014 final rule and

<sup>&</sup>lt;sup>22</sup> 79 FR 5032 (January 30, 2014).

<sup>&</sup>lt;sup>23</sup> Basin Electric Cooperative v. EPA, No. 14-9533 (10<sup>th</sup> Cir. March 31, 2014) and Wyoming v. EPA, No. 14-9529 (10<sup>th</sup> Cir. March 28, 2014).

Wyoming's challenges to the portion of the 2014 final rule establishing  $NO_x$  BART emission limits for Laramie River Units 1-3.<sup>24, 25</sup>

The settlement agreement requires the EPA to propose a FIP revision to include three major items:

- First, an alternative (BART alternative) to the NO<sub>x</sub> BART emission limits in the EPA's 2014 FIP that includes:
  - NO<sub>x</sub> emission limits for Laramie River Units 2 and 3 of 0.15 lb/MMBtu
     (30-day rolling average) commencing December 31, 2018, with an interim limit of 0.18 lb/MMBtu (30-day rolling average) commencing the date that the EPA's final revised FIP becomes effective and ending December 31, 2018; and
  - a SO<sub>2</sub> emission limit for Laramie River Units 1 and 2 of 0.12 lb/MMBtu
     (annual) averaged annually across the two units commencing December
     31, 2018.
- Second, a NO<sub>x</sub> BART emission limit for Laramie River Unit 1 of 0.06 lb/MMBtu
   on a 30-day rolling average commencing July 1, 2019, with an interim limit of

<sup>&</sup>lt;sup>24</sup> 81 FR 96450 (December 30, 2016).

<sup>&</sup>lt;sup>25</sup> Letter from Eileen T. McDonough, U.S. Department of Justice, to Elizabeth Morrisseau, Wyoming Attorney General's Office, and Christina F. Gomez, Denise W. Kennedy, and Patrick R, Day, Holland & Hart LLC (notification that both EPA and the Department of Justice (DOJ) determined not to withdraw their consent to the Settlement Agreement) (April 24, 2017); Settlement Agreement between Basin Electric Power Cooperative, the State of Wyoming, and the EPA (April 24, 2017); First Amendment to Settlement Agreement (pursuant to Paragraph 15 of the Agreement, extended the deadline for EPA to determine whether to withdraw or consent to the Settlement Agreement in Paragraph 1 to May 3, 2017); Second Amendment to Settlement Agreement (pursuant to Paragraph 15 of the Agreement, amended the date in Paragraph 5.b.ii. for the SO<sub>2</sub> emission limits for Laramie River Units 1 and 2 to commence December 31, 2018) (September 14, 2018).

0.18 lb/MMBtu on a 30-day rolling average commencing the date that the EPA's final revised FIP becomes effective and ending June 30, 2019. These limits are voluntarily requested by Basin Electric.

 Third, installation of SCR on Laramie River Unit 1 by July 1, 2019, (thereby revising the compliance date of the existing SIP) and installation of SNCR on Units 2 and 3 by December 30, 2018.

In accordance with other terms of the 2017 settlement, Wyoming also submitted a SIP revision to the EPA on April 5, 2018, to revise the SO<sub>2</sub> annual reporting requirements for Laramie River Units 1 and 2 as they pertain to the backstop trading program under 40 CFR 51.309. Specifically, Wyoming determined that Basin Electric must use SO<sub>2</sub> emission rates of 0.159 lb/MMBtu for Laramie River Unit 1 and 0.162 lb/MMBtu for Laramie River Unit 2, and multiply those rates by the actual annual heat input during the year for each unit to calculate and report emissions under the SO<sub>2</sub> backstop trading program. The revisions, as described in Section III., ensure that SO<sub>2</sub> emissions reductions proposed under the 2017 settlement agreement are no longer counted as reductions under the backstop trading program.

The EPA is required, per the 2017 settlement agreement, to sign a proposed rule no later than 6 months after receipt of Wyoming's SIP submittal.

### III. Proposed FIP Revisions

#### A. Background

In the 2011 submittal, Wyoming determined that emission limits for Laramie River Units 1-3 of 0.23 lb/MMBtu (30-day rolling average) each, reflecting installation of operation of new low  $NO_x$  burners (LNB) with overfire air (OFA), were reasonable measures to satisfy the units  $NO_x$  BART obligations. We disagreed with Wyoming that LNB with OFA was reasonable for  $NO_x$  BART and

subsequently finalized a FIP on January 30, 2014, with NO<sub>x</sub> BART emission limits of 0.07 lb/MMBtu (30-day rolling average) for each unit based on the installation and operation of new LNBs with OFA and SCR. The 2017 settlement agreement, described previously in Section II.G, established a deadline for the EPA to take specific actions related to the NO<sub>x</sub> emission limits established in the 2014 FIP for Laramie River Units 1-3 as well as new SO<sub>2</sub> emission limits and emission control technologies requirements.

#### B. The BART Alternative

We are proposing to amend the 2014 FIP to replace the  $NO_x$  BART requirements with a  $NO_x$  BART alternative. Specifically, we are proposing to revise the  $NO_x$  emission limits for Laramie River Units 2 and 3 and establish a  $SO_2$  emission limit for Units 1 and 2. We evaluate the  $NO_x$  BART alternative against the regulatory BART alternative requirements found in 40 CFR 51.308(e)(2) of the regional haze regulations.

The RHR establishes requirements for BART alternatives. Three of the requirements are of relevance to our evaluation of the BART alternative. We evaluate the proposed BART alternative to the  $NO_x$  BART requirements in the EPA's 2014 FIP with respect to each of these following elements:

A demonstration that the emissions trading program or other BART alternative
measure will achieve greater reasonable progress than would have resulted from the
installation and operation of BART at all sources subject to BART in the state and
covered by the BART alternative program.<sup>26</sup>

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<sup>&</sup>lt;sup>26</sup> 40 CFR 51.308(e)(2)(i).

- A requirement that all necessary emissions reductions take place during the period of the first long-term strategy for regional haze.<sup>27</sup>
- A demonstration that the emissions reductions resulting from the BART alternative measure will be surplus to those reductions resulting from the measures adopted to meet requirements of the CAA as of the baseline date of the SIP.<sup>28</sup>
- 1. Demonstration that the BART alternative measure will achieve greater reasonable progress.

Pursuant to 40 CFR 51.308(e)(2)(i), we must demonstrate that the BART alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the state and covered by the BART alternative program. For a source-specific BART alternative, the critical elements of this demonstration are:

- A list of all BART-eligible sources within the state;
- A list of all BART-eligible sources and all BART source categories covered by the BART alternative program;
- An analysis of BART and associated emission reductions;
- An analysis of projected emissions reductions achievable through the BART alternative; and
- A determination that the BART alternative achieves greater reasonable progress than would be achieved through the installation and operation of BART.

<sup>&</sup>lt;sup>27</sup> 40 CFR 51.308(e)(2)(iii). <sup>28</sup> 40 CFR 51.308(e)(2)(iv).

We summarize the proposed revisions to the 2014 FIP with respect to each of these elements and provide our evaluation in the proceeding sections.

a. A list of all BART-eligible sources within the state
 Table 1 shows a list of all the BART-eligible sources in the State of Wyoming.<sup>29</sup>

Table 1. Wyoming BART-eligible sources.

Facility
Jim Bridger
Laramie River
Dave Johnston
Naughton
Wyodak
Westvaco
Green River
Neil Simpson 1
Sinclair Refinery
Casper Refinery
Granger
Dyno Nobel
OCI Wyoming
P4 Production

<sup>&</sup>lt;sup>29</sup> 77 FR 33029 (June 4, 2012).

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 A list of all BART-eligible sources and all BART source categories covered by the BART alternative program.

Table 2 shows a list of all the BART-eligible sources covered by the BART alternative program along with the BART source category.

Table 2. Wyoming subject-to-BART sources covered by the BART alternative.

Company	Facility	Subject-to-BART units	Source Category
Basin Electric	Laramie River	Units 1 - 3	Electrical generating units

### c. Analysis of BART and associated emission reductions

Pursuant to  $40 \, \text{CFR} \, 51.308(e)(2)(i)(C)$ , the BART alternative must include an analysis of BART and associated emission reductions at Laramie River Units 1 - 3. As noted previously, the SIP and  $2014 \, \text{FIP}$  each included BART analyses and determinations for Units 1 - 3. Since we disapproved Wyoming's BART  $NO_x$  determinations for Laramie River Units 1 - 3, we conducted our own BART analysis and determination for  $NO_x$  BART in the  $2014 \, \text{FIP}.^{30}$  For the purposes of this evaluation, we consider  $NO_x$  BART for Laramie River Units 1 - 3 to be the  $2014 \, \text{FIP}$  BART determination summarized in Table 3.

Table 3. Summary of the EPA's Laramie River Units 1 - 3 NO<sub>x</sub> BART analysis.

Unit	Technology*	Emission Limit (lb/MMBtu) (30-day rolling average)	Emission Reduction (tpy)
Unit 1	New LNBs with OFA	0.07	4,880

<sup>30 79</sup> FR 5039 (January 30, 2014).

	and SCR		
Unit 2	New LNBs with OFA	0.07	5,129
	and SCR		
Unit 3	New LNBs with OFA	0.07	5,181
	and SCR		

<sup>\*</sup>The technology listed is the technology evaluated as BART, but sources can choose to use another technology or combination of technologies to meet established limits.

As described previously, reductions in SO<sub>2</sub> emissions were previously accounted for under the SO<sub>2</sub> backstop trading program, per 40 CFR 51.309.

d. Analysis of projected emissions reductions achievable through the BART alternative

To determine the projected emissions reductions achievable through the BART alternative, the emissions are calculated using the same process explained in the 2014 FIP, whereby a percent reduction is applied to the Laramie River Units 1-3 baseline emissions. However, the actual percent reduction for the BART alternative is different than the 2014 FIP because the controlled rates are different between the 2014 FIP and BART alternative. The percent reduction, for both the BART alternative and the 2014 FIP, is calculated as the controlled annual emission rate (in units of lb/MMBtu) divided by the annual average emission rate (in units of lb/MMBtu) during the BART baseline period (2001-2003). In the BART alternative, the modeled controlled NO<sub>x</sub> annual emission rate for Unit 1, using SCR controls, is 0.04 lb/MMBtu (annual) based on the expected annual emission performance under a 0.06 lb/MMBtu emission limit (30-day rolling average). Likewise, the modeled controlled NO<sub>x</sub> annual emission rate for Units 2 and 3, using LNB with OFA and SNCR, is 0.128 lb/MMBtu based on the expected annual emission performance as calculated in the 2014 FIP under a 0.15 lb/MMBtu emission rate (30-day rolling average). The controlled SO<sub>2</sub> annual emission rate for Units 1 and 2 is 0.115 lb/MMBtu (annual) for each unit based on the expected annual emission performance under a 0.12 lb/MMBtu emission limit (30-day rolling average).

The controlled annual emissions rates are divided by the average emission rates during the BART baseline period (2001 - 2003) to calculate the percent reduction for each unit. The average emission rates during the BART baseline period for each unit are:<sup>31</sup>

- Unit 1: 0.2585 lb NO<sub>x</sub>/MMBtu; 0.159 lb SO<sub>2</sub>/MMBtu,
- Unit 2: 0.2703 lb NO<sub>x</sub>/MMBtu; 0.162 lb SO<sub>2</sub>/MMBtu, and
- Unit 3: 0.2669 lb NO<sub>x</sub>/MMBtu.

The percent reduction for each unit is applied to the baseline emissions to determine the  $NO_x$  and  $SO_2$  emission reductions associated with the BART alternative for Laramie River Units 1-3 (Table 4).

Table 4. Summary of the EPA's Laramie River Units 1 - 3 BART alternative analysis.

		NO <sub>x</sub>		SO	2
Unit	Technology	Emission Limit (lb/MMBtu) (30-day rolling average)	Emission Reduction (tpy)	Emission Limit (lb/MMBtu) (30-day rolling average)	Emission Reduction (tpy)
Unit 1	New LNBs	0.06	4,880	0.12	1,032
	with OFA and				
	SCR				
Unit 2	New LNBs	0.15	3,342	0.12	1,091
	with OFA and				
	SNCR				
Unit 3	New LNBs	0.15	3,337	NA	NA
	with OFA and				
	SNCR				

NA = not applicable.

<sup>&</sup>lt;sup>31</sup> Laramie River Station Power Plant Visibility Impacts for Two Emissions Control Scenarios: Final Report. Prepared for Basin Electric, AECOM (May 2016). Data based on the information obtained from the EPA's Clean Air Markets Division (CAMD) database, available at: https://ampd.epa.gov/ampd/.

e. Determination that the BART alternative achieves greater reasonable progress than would be achieved through the installation and operation of BART.

Pursuant to 40 CFR 51.308(e)(2)(i)(E), the FIP revision must provide a determination under 40 CFR 51.308(e)(3) or otherwise based on the clear weight of evidence that the BART alternative achieves greater reasonable progress than BART. Two different tests for determining whether the BART alternative achieves greater reasonable progress than BART are outlined in 40 CFR 51.308(e)(3). Under the first test, if the distribution of emissions is not substantially different than under BART, and the BART alternative measure results in greater emission reductions, then the BART alternative measure may be deemed to achieve greater reasonable progress. Under the second test, if the distribution of emissions is significantly different, then dispersion modeling must be conducted to determine differences between BART and the BART alternative for each impacted Class I area for the worst and best 20 percent days. The modeling results would demonstrate "greater reasonable progress" if both of the following criteria are met: (1) visibility does not decline in any Class I area; and (2) there is an overall improvement in visibility, determined by comparing the average differences between BART and the BART alternative over all affected Class I areas. This modeling test is sometimes referred to as the "two-prong test."

For the proposed FIP revision, we determined that the BART alternative will not achieve greater emissions reductions than BART because, while the SO<sub>2</sub> emission reductions for Units 1 and 2 (1,032 tons per year (tpy) and 1,091 tpy respectively under the BART alternative, compared to 0 tpy under BART) and NO<sub>x</sub> emission reduction for Unit 1 (5,179 tpy under the BART alternative compared to 4,880 tpy under BART) are greater under the BART alternative, the NO<sub>x</sub> emission reductions under the BART alternative are less for Units 2 and 3 (3,342 lb/MMBtu and 3,337 lb/MMBtu, respectively) than the NO<sub>x</sub> emission reductions under BART (5,129 lb/MMBtu and 5,181

lb/MMBtu, respectively). Therefore, we evaluated the results of modeling (using the Comprehensive Air Quality Model with Extensions (CAMx) model version 5.41<sup>32</sup>) performed by a contractor for Basin Electric, AECOM, to assess whether the BART alternative would result in "greater reasonable progress" under the two-prong test in 40 CFR 51.308(e)(3).<sup>33</sup>

CAMx has a scientifically current treatment of chemistry to simulate transformation of emissions into visibility-impairing particles of species such as ammonium nitrate and ammonium sulfate, and is often employed in large-scale modeling when many sources of pollution and/or long transport distances are involved. Photochemical grid models like CAMx include all emissions sources and have realistic representation of formation, transport, and removal processes of the particulate matter that causes visibility degradation. The use of the CAMx model for analyzing potential cumulative air quality impacts has been well established: the model has been used for previous visibility modeling studies in the U.S., including SIPs. 34

The modeling followed a modeling protocol that was reviewed by the EPA.<sup>35</sup> The starting point for assessing visibility impacts for different levels of emissions from Laramie River was the Three-State Air Quality Modeling Study (3SAQS) modeling platform that provides a framework for addressing air quality impacts in Colorado, Utah and Wyoming. The 3SAQS is a publicly available

<sup>&</sup>lt;sup>32</sup> CAMx modeling software (http://www.camx.com/download/default.aspx) and User's Guide

<sup>(</sup>http://www.camx.com/about/default.aspx) are available on these CAMx web pages.

33 Laramie River Station Power Plant Visibility Impacts for Two Emissions Control Scenarios: Final Report. Prepared for Basin Electric, AECOM (May 2016).

<sup>&</sup>lt;sup>34</sup> 82 FR 46903 (October 10, 2017)(Final action for the Coronado Generating Station in the Regional Haze Plan for Arizona); 81 FR 296 (January 5, 2016)(Final action for Texas and Oklahoma Regional Haze Plans).

<sup>&</sup>lt;sup>35</sup> Photochemical Modeling Protocol for the Visibility Assessment of Basin Electric Laramie River Power Plant. Prepared for Basin Electric, AECOM (September 2015). Draft Modeling Guidance for Demonstrating Attainment of Air Quality Goals for Ozone, PM<sub>2.5</sub>, and Regional Haze, EPA (December 3, 2014).

platform intended to facilitate air resources analyses. 36 The 3SAQS developed a base year modeling platform using the year 2008 to leverage work completed during the West-wide Jump-start Air Ouality modeling study (WestJump).<sup>37</sup> For the Laramie River modeling, AECOM performed additional modeling to refine the modeling domain from the 3SAQS 12-kilometer (km) grid resolution to a finer 4-km grid resolution. The refined spatial resolution was used to more accurately simulate the concentration gradients of gas and particulate species in the plumes emitted from the source facilities. The AECOM modeling data sets used for this action are available in the docket. 38 For the two-prong test, an existing projected 2020 emissions database was used to estimate emissions of sources within the modeling domains. The existing 2020 database was derived from the 3SAQS study, which projected emissions from 2008 to 2020. Since the BART alternative emissions reductions will not be fully in place until the end of 2018, the 2020 emissions projections are more representative of the air quality conditions that will be obtained while the BART alternative is being implemented than the 2008 database. In the three 2020 CAMx modeling scenarios, Laramie River emissions were modeled to represent the baseline, the BART 2014 FIP, and the proposed BART alternative as described in the proceeding section and Table 5.

The CAMx-modeled concentrations for sulfur, nitrogen, and primary particulate matter (PM) were tracked using the CAMx Particulate Source Apportionment Technology (PSAT) tool<sup>39</sup> so that

<sup>&</sup>lt;sup>36</sup> Three-State Air Quality Modeling Study CAMx Photochemical Grid Model Final Model Performance Evaluation. University of North Carolina and Environ (September 2014).

http://views.cira.colostate.edu/wiki/Attachments/Modeling/3SAQS\_Base08b\_MPE\_Final\_30Sep2014.pdf.

<sup>&</sup>lt;sup>37</sup> https://www.wrapair2.org/WestJumpAQMS.aspx. Additional information on the WestJump study available in the docket for this action, "WestJump Fact Sheet."

<sup>&</sup>lt;sup>38</sup> CAMx modeling data available on hard disk in the docket.

<sup>&</sup>lt;sup>39</sup> PSAT is included in the CAMx modeling code and is described in the CAMx User's Guide available at: http://www.camx.com/download/default.aspx.

the concentrations and visibility impacts due to Laramie River could be separated out from those due to the total of all other modeled sources. AECOM computed visibility impairment due to Laramie River using the EPA's Modeled Attainment Test Software (MATS) tool which bias-corrects CAMx outputs to available measurements of PM species and uses the revised IMPROVE equation to calculate the 20 percent best and 20 percent worst days for visibility impacts. 40

As described previously, the CAMx system was configured using the 3SAQS modeling platform to simulate future year 2020 conditions for the following modeling scenarios:

- <u>Baseline</u>: this scenario included the actual emission rates for all three units during the 2001-2003 BART baseline period that were previously modeled in CALPUFF simulations.
- BART: this scenario included the emission rates for all three units that correspond to the EPA's 2014 FIP.
- BART alternative: this scenario included the emission rates for all three units that correspond to the BART alternative.

The only differences among scenarios are the  $NO_x$  and  $SO_2$  emission rates for Laramie River (Table 5). All other model inputs, including other regional emission sources, remained unchanged among all future year scenarios.

Table 5. Laramie River Units 1-3 emissions for the CAMx model by scenario projected to year 2020 conditions.

<sup>&</sup>lt;sup>40</sup> IMPROVE refers to a monitoring network and also to the equation used to convert monitored concentrations to visibility impacts. "Revised IMPROVE Algorithm for Estimating Light Extinction from Particle Speciation Data", IMPROVE technical subcommittee for algorithm review (January 2006). http://vista.cira.colostate.edu/Improve/gray-literature/.

Scenario	NO <sub>x</sub> (tpy)	SO <sub>2</sub> (tpy)	VOC (tpy)	CO (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)	NH <sub>3</sub> (tpy)
Baseline	18,890	11,605	234	1,950	2,748	2,440	41
BART	3,560	11,605	234	1,950	2,748	2,440	41
BART alternative	7,030	9,479	234	1,950	2,748	2,440	41

Maintaining consistent model inputs allows the CAMx modeling results to be easily compared to analyze the effects of different emissions control scenarios. As described previously, the PSAT was applied to the simulations to track and account for the particulate mass concentrations that originate or are formed as a result of emissions from Laramie River.

Once all the scenarios above were simulated with the photochemical grid model, model results were post-processed to isolate the changes to visibility conditions as a result of emissions controls applied to Laramie River Units 1-3 under the scenarios described previously. To assess compliance with the RHR requirements, visibility changes are assessed during the 20 percent best visibility days and the 20 percent worst visibility days at each potentially affected federally regulated Class I area. Model-predicted visibility impacts at the thirteen Class I areas in the 4-km modeling domain were estimated for each of the three future year modeling scenarios.

The MATS tool was used to convert model concentrations into visibility estimates and account for quantifiable model bias. All models are affected by biases, i.e., model results simulate complex natural phenomena and, as such, model results can either over or under estimate measured concentrations. The use of MATS helps mitigate model bias by pairing model estimates of PM species concentrations with actual measured conditions.

As a final step, Laramie River's visibility impact under the BART alternative is compared to the visibility impact under the Baseline and BART scenarios to determine if the BART alternative meets the requirements of the two-prong test, i.e., prong 1, no degradation compared to the Baseline at

any Class I area on the best visibility days, and prong 2, greater progress compared to BART averaged over all Class I areas on the worst visibility days.

The visibility impacts derived from modeling results are summarized in Tables 6 and 7. The tables show the projected Laramie River contribution to visibility on the 20 percent best days and worst days, respectively, for the 2020 Baseline (Column A), BART (Column B), and BART alternative (Column C) scenarios at each of the Class I areas analyzed. The last two columns show the predicted visibility benefits from the BART alternative scenario relative to both the 2020 baseline (Column D) and BART (Column E). Also shown at the bottom row are the average visibility values from all the areas. Negative values in Column D indicate that the BART alternative scenario has smaller contributions to visibility relative to the baseline ("prong 1"), and therefore it improves visibility over the baseline. Similarly, negative values in Column E indicate that the BART alternative scenario has smaller contributions to visibility relative to the BART scenario ("prong 2").

Table 6. Laramie River visibility impact (Units 1-3) for the 2020 baseline, BART, and BART alternative scenarios on the 20 percent best days.

Class I area*	[A] Baseline	[B] BART	[C] BART alternative	[D] BART alternative	[E] BART alternative –
Cidibib I died	(dv)	(dv)	(dv)	- Baseline	BART
Badland NP	0.0212	0.0131	0.0138	-0.0074	0.0007
Bridger WA	0.0000	0.0000	0.0000	0.0000	0.0000
Fitzpatrick WA	0.0000	0.0000	0.0000	0.0000	0.0000
Grand Teton NP	0.0012	0.0012	0.0009	-0.0003	-0.0003
Mount Zirkel WA	0.0000	0.0000	0.0000	0.0000	0.0000
North Absaroka WA**	0.0005	0.0005	0.0004	-0.0001	-0.0001
Rawah WA	0.0000	0.0000	0.0000	0.0000	0.0000

Red Rock Lakes WA	0.0012	0.0012	0.0009	-0.0003	-0.0003
Rocky Mountain NP	0.0000	0.0000	0.0000	0.0000	0.0000
Teton WA	0.0012	0.0012	0.0009	-0.0003	-0.0003
Washakie WA**	0.0005	0.0005	0.0004	-0.0001	-0.0001
Wind Cave NP	0.0055	0.0051	0.0047	-0.0008	-0.0004
Yellowstone NP	0.0012	0.0012	0.0009	-0.0003	-0.0003
All Class I Area Average***	0.0025	0.00185	0.00176	Not applicable	-0.00009

Table 7. Laramie River visibility impact (Units 1-3) for the 2020 baseline, BART, and BART alternative scenarios on the 20 percent worst days.

Class I area*	[A] Baseline (dv)	[B] BART (dv)	[C] BART alternative (dv)	[D] BART alternative – Baseline	[E] BART alternative – BART
Badland NP	0.0259	0.0177	0.0176	-0.0083	-0.0001
Bridger WA	0.0029	0.0028	0.0023	-0.0006	-0.0005
Fitzpatrick WA	0.0029	0.0028	0.0023	-0.0006	-0.0005
Grand Teton NP	0.0024	0.0023	0.0019	-0.0005	-0.0004
Mount Zirkel WA	0.0065	0.0059	0.0053	-0.0012	-0.0006
North Absaroka WA**	0.0003	0.0003	0.0001	-0.0002	-0.0002
Rawah WA	0.0065	0.0059	0.0053	-0.0012	-0.0006
Red Rock Lakes WA	0.0024	0.0023	0.0019	-0.0005	-0.0004
Rocky Mountain NP	0.0137	0.0119	0.0106	-0.0031	-0.0013
Teton WA	0.0024	0.0023	0.0019	-0.0005	-0.0004

<sup>\*</sup>NP = National Park; WA = Wilderness Area
\*\*Values reported for these Class I areas have been calculated with only 2 years of valid monitoring data.

<sup>\*\*\*</sup> The average visibility impact is calculated as the sum of the visibility impacts divided by the number of Class I areas.

Washakie WA**	0.0003	0.0003	0.0001	-0.0002	-0.0002
Wind Cave NP	0.0369	0.0267	0.0253	-0.0116	-0.0014
Yellowstone NP	0.0024	0.0023	0.0019	-0.0005	-0.0004
All Class I Area Average	0.00812	0.00642	0.00589	Not applicable	-0.00054

<sup>\*</sup> NP = National Park; WA = Wilderness Area

Table 6 shows that the proposed BART alternative emissions will not result in degradation of visibility on the 20 percent best days compared to the 2020 baseline conditions at any of the 13 analyzed Class I areas. In each individual area, visibility is predicted to improve or remain unchanged compared to the 2020 baseline visibility since all values shown in Column D are either negative or zero. Overall, the BART alternative scenario shows an average improvement in visibility of 0.00009 deciviews (dv) relative to BART for the best 20 percent days. Table 6 also shows that for the BART alternative scenario, visibility during the best days improves or remains unchanged at all Class I areas compared to the BART scenario except for Badlands National Park.

Table 7 shows that the proposed BART alternative emissions will not result in degradation of visibility on the 20 percent worst days compared to the 2020 baseline conditions at any of the 13 analyzed Class I areas. In each individual area, visibility is predicted to improve compared to the 2020 baseline visibility, since all values in Column D are negative. Overall, the BART alternative shows an average improvement in visibility of 0.00054 dv relative to BART for the 20 percent worst days.

Table 7 also shows that for the BART alternative scenario, visibility during the 20 percent worst days improves at all Class I areas compared to the BART scenario.

Pursuant to 40 CFR 51.309(e)(3), the modeling demonstrates "greater reasonable progress" if both of the following criteria are met: (1) visibility does not decline in any Class I area; and (2) there is

<sup>\*\*</sup> Values reported for these Class I areas have been calculated with only 2 years of valid monitoring data.

an overall improvement in visibility, determined by comparing the average differences between BART and the BART alternative over all affected Class I areas. For the first prong of the modeling test, the modeling results show that visibility improves or stays the same (i.e., does not decline) under the BART alternative scenario for all Class I areas for the 20 percent best and 20 percent worst days when compared with the baseline scenario (Column D in Tables 6 and 7). For the second prong of the modeling test, the modeling results show that there is an overall improvement in visibility under the BART alternative scenario for all Class I areas averaged over the 20 percent best and 20 percent worst days when compared with the BART scenario (Column E in Tables 6 and 7). Based on the modeling analysis, we propose to find that the BART alternative would achieve greater reasonable progress than BART under 40 CFR 51.308(e)(3).

Additionally, AECOM used PSAT to further evaluate the modeling to determine whether the results represent "real" modeled visibility differences and not the result of numerical artifacts or "noise" in the model results. The numerical method used to simulate aerosol thermodynamics in CAMx may be subject to some level of numerical error when calculating the difference between two model simulations. This typically occurs in areas with high concentrations of sulfate and nitrate, and numerical error is manifested as areas of small random checkerboard increases and decreases in concentrations, as illustrated in the AECOM final report, Figure A-1, left panels. <sup>41</sup> Note that this numerical error is typically a very small percentage of the total modeled nitrate and sulfate concentration. However, this error can be relatively large in comparison to the impacts of a single emissions source such as the Laramie River Station. The PSAT-based evaluation approach eliminates

<sup>&</sup>lt;sup>41</sup> Laramie River Station Power Plant Visibility Impacts for Two Emissions Control Scenarios: Final Report. Prepared for Basin Electric, AECOM (May 2016).

numerical error in the model results by using model tracer species that track the emissions and chemical transformation of SO<sub>2</sub> and NO<sub>x</sub> from a single source. By calculating the changes in the PSAT mass attributed to Laramie River Station in the baseline for the 2014 FIP and BART alternative simulations, the effects of numerical error in other emissions sources are excluded from the analysis of the Laramie River Station impacts. The AECOM report Figure A-1, right panels, shows the nitrate mass attributed to the Laramie River Station and illustrates that numerical error from other sources is eliminated using this approach. Thus, the PSAT plots show that concentrations within the modeling domain are attributable to the emissions from Laramie River, and therefore provide reliable data for assessing whether there is a numerical difference between the visibility benefits from the BART and BART alternative control scenarios.

Finally, we note that 40 CFR 51.308(e)(3) allows for a straight numerical test, regardless of the magnitude of the computed differences. The regulation does not specify a minimum delta deciview difference between the modeled scenarios that must be achieved in order for a BART alternative to be deemed to achieve greater reasonable progress than BART. Accordingly, given that the modeling results show that visibility under the BART alternative does not decline at any of the 13 affected Class I areas compared to the baseline (prong 1) and will result in improved visibility, on average, across all 13 Class I areas compared to BART in the 2014 FIP (prong 2), we propose to find that the BART alternative will achieve greater reasonable progress than BART (2014 FIP) under the two-prong modeling test in 40 CFR 51.308(e)(3).

 A requirement that all necessary emissions reductions take place during the period of the first long-term strategy for regional haze.

Pursuant to 40 CFR 51.308(e)(2)(iii), all necessary emission reductions must take place during the period of the first long-term strategy for regional haze. The RHR further requires a detailed

description of the BART alternative measure, including schedules for implementation, the emission reductions required by the program, all necessary administrative and technical procedures for implementing the program, rules for accounting and monitoring emissions, and procedures for enforcement.<sup>42</sup>

As noted previously, the 2017 settlement agreement includes requirements for implementing the BART alternative. In addition to the emission limitations for NO<sub>x</sub> and SO<sub>2</sub>, the 2017 settlement agreement includes compliance dates, interim limits, averaging times, and control technology requirements. The monitoring, recordkeeping, and reporting requirements, <sup>43</sup> along with other aspects of the 2014 FIP that are not contained within the 2017 settlement agreement, remain unchanged in the EPA's FIP. <sup>44</sup> The compliance date for the BART alternative is December 31, 2018, for Laramie River Units 2 and 3 to install and operate SNCR with corresponding NO<sub>x</sub> emission limits of 0.15 lb/MMBtu (30-day rolling average). <sup>45</sup> Laramie River Units 2 and 3 must also meet interim NO<sub>x</sub> emission limits of 0.18 lb/MMBtu (30-day rolling average; each) commencing the date that the EPA's final revised FIP becomes effective and ending on December 30, 2018. <sup>46</sup> In addition, Laramie River Units 1 and 2 must meet an SO<sub>2</sub> emission limit of 0.12 lb/MMBtu averaged annually across the two units commencing on December 31, 2018. <sup>47</sup> Therefore, we propose to find that the proposed FIP revision along with the existing FIP provisions will ensure that all necessary emission reductions take place

<sup>&</sup>lt;sup>42</sup> 40 CFR 51.308(e)(2)(iii).

<sup>&</sup>lt;sup>43</sup> 40 CFR 52.2636(e)-(h).

<sup>44 40</sup> CFR 52 2636

<sup>&</sup>lt;sup>45</sup> Settlement Agreement between Basin Electric Power Cooperative, the State of Wyoming and the EPA (April 24, 2017).

<sup>46</sup> Ibid.

 $<sup>^{47}</sup>$  Second Amendment to Settlement Agreement (pursuant to Paragraph 15 of the Agreement, amended the date in Paragraph 5.b.ii. for the SO<sub>2</sub> emission limits for Laramie River Units 1 and 2 to commence December 31, 2018)(September 14, 2018).

during the period of the first long-term strategy and therefore meets the requirements of 40 CFR 51.308(e)(2)(iii).

3. Demonstration that emissions reductions from the BART alternative measure will be surplus.

Pursuant to 40 CFR 51.308(e)(2)(iv), the SIP (or FIP) must demonstrate that the emissions reductions resulting from the BART alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP. The baseline date for regional haze SIPs is 2002. All the NO<sub>x</sub> emission reductions required by the BART alternative are surplus to reductions resulting from SIP measures applicable to Laramie River as of 2002. In addition, the proposed SIP revision discussed in Section IV, revises the SO<sub>2</sub> emissions reporting requirements for Laramie River Units 1 and 2 so that the SO<sub>2</sub> emissions reductions achieved from the 2017 settlement agreement are not also counted towards reductions under the SO<sub>2</sub> backstop trading program and thereby included in the regional SO<sub>2</sub> milestone. As discussed in Section IV, we propose to approve these changes to the SIP. Therefore, we propose to find that the BART alternative complies with 40 CFR 51.308(e)(2)(iv). In sum, we propose to find that the

Finally, in accordance with the proposed establishment of SO<sub>2</sub> emission limits in the proposed FIP for Laramie River Units 1 and 2, we also propose to revise the monitoring, recordkeeping, and reporting requirements of the 2014 FIP to reflect the establishment of SO<sub>2</sub> emission limits in the proposed FIP. These proposed revisions support CAA section 110(a)(2)(A) requiring implementation plans to include enforceable emission limitations. In order to be considered enforceable, emission limits must include associated monitoring, recordkeeping, and reporting requirements. In addition, the CAA and the EPA's implementing regulations expressly require implementation plans to include regulatory requirements related to monitoring, recordkeeping, and reporting for applicable emissions

limitations. We do not propose to alter the monitoring, record keeping, and reporting requirements established in the 2014 FIP that relate to compliance with the BART emission limit for  $NO_x$ .

### C. The NO<sub>x</sub> Emission Limit for Laramie River Unit 1

In addition to the BART alternative, we are also proposing to amend the 2014 FIP by revising the NO<sub>x</sub> emission limit for Laramie River Unit 1 as voluntarily requested by Basin Electric in the settlement agreement.<sup>49</sup> The amendment revises the NO<sub>x</sub> emission limit for Unit 1 from the NO<sub>x</sub> BART limit of 0.07 lb/MMBtu to 0.06 lb/MMBtu (30-day rolling average) commencing July 1, 2019, with an interim limit of 0.18 lb/MMBtu (30-day rolling average) commencing the effective date of the EPA's final revised FIP and ending June 30, 2019. Because the revision to the NO<sub>x</sub> emission limit for Laramie River Unit 1 achieves greater NO<sub>x</sub> emission reductions than the relevant portions of the 2014 FIP, we propose to amend the Wyoming regional haze 2014 FIP with this revision.

# IV. Proposed Action on Submitted SIP Revisions

### A. Background

Wyoming submitted SIP revisions on January 12, 2011, and April 19, 2012, that address regional haze requirements under 40 CFR 51.309. As explained previously, 40 CFR 51.309 allows certain western Transport Region States an optional way to fulfill regional haze requirements as opposed to adopting the requirements under 40 CFR 51.308. As required by 40 CFR 51.309, the participating states must adopt a trading program, or what has been termed the Western Backstop

<sup>48</sup> See, e.g. CAA section 110(a)(2)(F) and 40 CFR 51.212(c).

<sup>49</sup> Settlement Agreement between Basin Electric Power Cooperative, the State of Wyoming and the EPA (April 24, 2017).

Sulfur Dioxide Trading Program (backstop trading program or trading program). One of the components of the backstop trading program is for stationary source SO<sub>2</sub> emissions reductions. Thus, under 40 CFR 51.309, states can satisfy the section 308 SO<sub>2</sub> BART requirements by adopting SO<sub>2</sub> emissions milestones and a backstop trading program. Under this approach, states must establish declining SO<sub>2</sub> emissions milestones for each year of the program through 2018. If the milestones are exceeded in any year, the backstop trading program is triggered.

Among other things, the January 2011 and April 2012 SIP submittals contained amendments to the Wyoming Air Quality Standards and Regulations (WAQSR) Chapter 14, *Emission Trading Program Regulations*, Section 3, *Sulfur dioxide milestone inventory*. On December 12, 2012, we approved these amendments into the SIP as meeting the requirements of 40 CFR 51.309.<sup>51</sup>

### B. April 5, 2018 Submittal

On April 5, 2018, Wyoming submitted a SIP revision containing amendments to WAQSR, Chapter 14, *Emission Trading Program Regulations*, Section 3, *Sulfur dioxide milestone inventory* and additions to the regional haze narrative<sup>52</sup>. The amendments modify the SO<sub>2</sub> emissions backstop trading program reporting requirements for Laramie River Station Units 1 and 2. The revisions ensure that SO<sub>2</sub> emissions reductions proposed under the 2017 settlement are no longer counted as reductions under the backstop trading program. Specifically, the amendments revise the SO<sub>2</sub> emissions reporting requirements for Laramie River Units 1 and 2 so that Unit 1's SO<sub>2</sub> emissions shall be reported based on an annual emission rate of 0.159 lb/MMBtu multiplied by the actual annual heat

<sup>&</sup>lt;sup>50</sup> 40 CFR 51.309(d)(4).

<sup>&</sup>lt;sup>51</sup> 77 FR 73926 (December 12, 2012).

<sup>&</sup>lt;sup>52</sup> State of Wyoming. Addressing Regional Haze Visibility Protection For The Mandatory Federal Class I Areas Required Under 40 CFR 51.309. Revised April 5, 2018.

input, and Unit 2's SO<sub>2</sub> emissions shall be reported based on an annual emission rate of 0.162 lb/MMBtu multiplied by the actual heat input. Annual SO<sub>2</sub> emissions for Laramie River Unit 3 shall be reported as otherwise provided in Chapter 14, Section 3(b). The revisions also require that the revised SO<sub>2</sub> emissions reporting requirements for Units 1 and 2 commence as of the year that Basin Electric commences operation of SCR at Unit 1 and that Wyoming use the revised SO<sub>2</sub> emissions reporting requirements for all purposes under Chapter 14. The additions to the SIP narrative provide an explanation of the regulatory amendments. The Wyoming Environmental Quality Council approved the proposed revisions on December 5, 2017 (effective February 5, 2018).

# C. The EPA's Evaluation of the SO<sub>2</sub> Emissions Reporting Amendments

We are proposing to approve Wyoming's amendments to the  $SO_2$  emissions reporting requirements and the addition to the SIP narrative for Laramie River Units 1 and 2, including when Basin Electric is required to use the revised  $SO_2$  emissions reporting requirements and how the  $SO_2$  emissions will be reported within the context of the  $SO_2$  emissions milestone inventory. Together, these revisions ensure that the  $SO_2$  emissions reductions in the BART alternative are not "double-counted" in the backstop trading program in order to meet the requirement in 40 CFR 51.308(e)(2)(iv) (requirement that emissions reductions from the alternative will be surplus to the SIP). We evaluated how these revisions meet the relevant requirements under 40 CFR 51.309(d)(4).

We agree with Wyoming that the revisions to the  $SO_2$  emissions reporting requirements for Laramie River Units 1 and 2 are sufficient to ensure that the  $SO_2$  emissions reductions obtained under the settlement agreement under the  $NO_x$  BART alternative (see Section III) are

not also counted towards reductions under the  $SO_2$  backstop trading program milestones.<sup>53</sup> The annual SO<sub>2</sub> emission rates of 0.159 lb/MMBtu and 0.162 lb/MMBtu (30-day average) for Laramie River Units 1 and 2, respectively, reflect the actual average emission rates from 2001 to 2003 for these units.<sup>54</sup> By reporting SO<sub>2</sub> emissions using the average annual SO<sub>2</sub> emission rates from 2001 to 2003 (and multiplied by the actual annual heat input) instead of reporting the actual average annual SO<sub>2</sub> emission rates, emissions reductions achieved since the baseline period at these units will no longer be included in the backstop trading program. Thus, if EPA decides to finalize this proposed action, instead of reporting the actual annual SO<sub>2</sub> emissions for Units 1 and 2 achieved under the revised average annual emission limit of 0.115 lb/MMBtu (0.12 lb/MMBtu; 30-day rolling average limit), pursuant to 40 CFR 51.309(d)(4)(vi)(A) and the settlement agreement, as of the year that Basin Electric commences operation of SCR on Unit 1, SO<sub>2</sub> emissions would be calculated using the average annual emission rates reflective of the baseline period (0.159 lb/MMBtu for Unit 1 and 0.162 lb/MMBtu for Unit 2) multiplied by the actual annual heat input. Thus, these revisions not only ensure that the SO<sub>2</sub> emissions reductions achieved under the NO<sub>x</sub> BART alternative are only accounted for under the BART alternative, and not "double-counted," but also describe how compliance with the backstop trading program requirements will be determined as required under 40 CFR 51.309(d)(4)(i).

Under 40 CFR 51.309(d)(4)(ii), documentation of the SO<sub>2</sub> emission calculation methodology and any changes to the specific methodology used to calculate the emissions at any

<sup>&</sup>lt;sup>53</sup> 40 CFR 51.309(d)(4)(i).

<sup>&</sup>lt;sup>54</sup> Laramie River Station Power Plant Visibility Impacts for Two Emissions Control Scenarios: Final Report.

Prepared for Basin Electric, AECOM (May 2016). Data based on the information obtained from the EPA's Clean Air Markets Division (CAMD) database, available at: https://ampd.epa.gov/ampd/.

emitting unit for any year after the base year must be provided in the backstop trading program implementation plan. The revisions in Wyoming's 2018 SIP submittal: (1) document the changes to the specific methodology used to calculate and report SO<sub>2</sub> emissions at Laramie River Units 1 and 2, including the annual average SO<sub>2</sub> emission rates for each unit and how to determine the actual annual heat rate (Chapter 14, Section 3(d)); (2) specify that the revised methodology will commence as of the year that SCR is operational on Unit 1 (Chapter 14, Section 3(d)(i)); and (3) clarify that the revisions to the SO<sub>2</sub> emissions reporting methodology for Units 1 and 2 shall be used for all purposes under Chapter 14, *Emission Trading Program Regulations* (Chapter 14, Section 3(e)). Thus, the revisions meet the requirements of 40 CFR 51.309(d)(4)(ii) because the amendments to the SO<sub>2</sub> emissions reporting requirements provide for documentation of the changes to the specific methodology used to calculate emissions at Laramie River Units 1 and 2 for the relevant years after the base year, and the amendments are contained within Wyoming's backstop trading program implementation plan (Chapter 14, Section 3).

Under 40 CFR 51.309(d)(4)(iii), the EPA-approved plan includes provisions requiring the monitoring, recordkeeping, and annual reporting of actual stationary source SO<sub>2</sub> emissions within the State, (Chapter 14, Section 3(b)). These requirements continue to apply to the Laramie River Units 1 and 2 and were not modified in Wyoming's 2018 SIP submittal. Likewise, the requirements found in 40 CFR 51.309(d)(4)(iv), 40 CFR 51.309(d)(4)(v) and 40 CFR 51.309(d)(4)(vi) pertaining to the market trading program and provisions for the 2018 milestone were not modified in Wyoming's 2018 SIP submittal. Because the revisions to the SO<sub>2</sub> emissions reporting requirements for Laramie River Units 1 and 2 meet the requirements of 40 CFR 51.309(d)(4) we propose to approve the SIP revisions to Chapter 14, Section 3.

### V. Clean Air Act Section 110(l)

Under CAA section 110(*l*), the EPA cannot approve a plan revision "if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress (as defined in section 7501 of this title), or any other applicable requirement of this chapter." We propose to find that these revisions satisfy section 110(*l*). The previous sections of the notice explain how the proposed FIP revision will comply with applicable regional haze requirements and general implementation plan requirements such as enforceability. Likewise, the SIP revision will also comply with applicable regional haze requirements. With respect to requirements concerning attainment and reasonable further progress, the Wyoming Regional Haze SIP and FIP, as revised by this action, will result in a significant reduction in emissions compared to historical levels. In addition, the area where the Laramie River Station is located is in attainment for all National Ambient Air Quality Standards (NAAQS). Thus, the revisions will ensure a significant reduction in NO<sub>x</sub> and SO<sub>2</sub> emissions compared to historical levels in an area that has not been designated nonattainment for the relevant NAAQS at those current levels.

# VI. Consultation with FLMs

There are seven (7) Class I areas in the State of Wyoming. The United States Forest Service manages the Bridger Wilderness, Fitzpatrick Wilderness, North Absaroka Wilderness, Teton Wilderness, and Washakie Wilderness. The National Park Service manages the Grand Teton National Park and Yellowstone National Park. The RHR grants the FLMs, regardless of

<sup>&</sup>lt;sup>55</sup> Note that "reasonable further progress" as used in CAA section 110(l) is a reference to that term as defined in section 301(a) (i.e., 42 U.S.C. 7501(a)), and as such means reductions required to attain the National Ambient Air Quality Standards (NAAQS) set for criteria pollutants under section 109. This term as used in section 110(l) (and defined in section 301(a)) is *not* synonymous with "reasonable progress" as that term is used in the regional haze program. Instead, section 110(l) provides that EPA cannot approve plan revisions that interfere with regional haze requirements (including reasonable progress requirements) insofar as they are "other applicable requirement[s]" of the Clean Air Act.

whether a FLM manages a Class I area within the state, a special role in the review of regional haze implementation plans, summarized in Section II.E of this preamble.

There are obligations to consult on plan revisions under 40 CFR 51.308(i)(3). Thus, we consulted with the Forest Service, the Fish and Wildlife Service and the National Park Service on the proposed FIP revision. We described the proposed revisions to the regional haze 2014 FIP and 2018 SIP revisions with the Forest Service, the Fish and Wildlife Service and the National Park Service on August 15, 2018 and met our obligations under 40 CFR 51.308(i)(3).

### VII. The EPA's Proposed Action

In this action, the EPA is proposing to approve SIP amendments, shown in Table 8, to the Wyoming Air Quality Standards and Regulations, Chapter 14, *Emission Trading Program*Regulations, Section 3, Sulfur dioxide milestone inventory, revising the backstop trading program SO<sub>2</sub> emissions reporting requirements for Laramie River Units 1 and 2.

Table 8 - List of Wyoming Amendments that EPA Is Proposing to Approve

Amended Sections in April 5, 2018 Submittal Proposed for Approval	
Chapter 14, Section 3: (d), (e)	

We are also proposing to amend the Wyoming regional haze FIP contained in 40 CFR 52.2636 to remove the 2014 FIP's NO<sub>x</sub> emission limits and instead incorporate the BART alternative and associated NO<sub>x</sub> and SO<sub>2</sub> emission limits for Laramie River Units 1-3, revise the NO<sub>x</sub> emission limit for Unit 1, and add control technology requirements. Specifically, the EPA is proposing to revise the NO<sub>x</sub> emission limits and add SO<sub>2</sub> emission limits and control technologies in Table 2 of 40 CFR 52.2636(c)(1) for Laramie River Units 1-3. We are also proposing to add associated compliance dates in 40 CFR 52.2636(d)(4) for Laramie River Units 1-3. Finally, we are

proposing to reference  $SO_2$  in the following sections: *Applicability* (40 CFR 52.2636(a)); *Definitions* (40 CFR 52.2636(b)); *Compliance determinations for NO<sub>x</sub>* (40 CFR 52.2636(e)); *Reporting* (40 CFR 52.2636(h)); and *Notifications* (40 CFR 52.2636(i)). We are not proposing to change any other regulatory text in 40 CFR 52.2636.

## VIII. Incorporation by Reference

In this document, EPA is proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, EPA is proposing to incorporate by reference the SIP amendments described in Section VII of this preamble. The EPA has made, and will continue to make, these materials generally available through www.regulations.gov (refer to docket EPA-R08-OAR-2018-0606) and at the EPA Region 8 Office (please contact the person identified in the "For Further Information Contact" section of this preamble for more information).

## IX. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563:

Improving Regulation and Regulatory Review

This action is not a "significant regulatory action" under the terms of Executive Order 12866<sup>56</sup> and was therefore not submitted to the Office of Management and Budget (OMB) for review. This proposed rule applies to only one facility in the State of Wyoming. It is therefore not a rule of general applicability.

B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs

<sup>&</sup>lt;sup>56</sup> 58 FR 51735, 51738 (October 4, 1993).

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

#### *C*. Paperwork Reduction Act

This proposed action does not impose an information collection burden under the provisions of the Paperwork Reduction Act (PRA).<sup>57</sup> A "collection of information" under the PRA means "the obtaining, causing to be obtained, soliciting, or requiring the disclosure to an agency, third parties or the public of information by or for an agency by means of identical questions posed to, or identical reporting, recordkeeping, or disclosure requirements imposed on, ten or more persons, whether such collection of information is mandatory, voluntary, or required to obtain or retain a benefit." Because this proposed rule revises the NO<sub>x</sub> and SO<sub>2</sub> emission limits and associated reporting requirements for one facility, the PRA does not apply.

#### D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations and small governmental jurisdictions.

For purposes of assessing the impacts of this proposed rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA)

<sup>&</sup>lt;sup>57</sup> 44 U.S.C. 3501 *et seq*. <sup>58</sup> 5 CFR 1320.3(c) (emphasis added).

regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this proposed rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This rule does not impose any requirements or create impacts on small entities as no small entities are subject to the requirements of this rule.

## E. Unfunded Mandates Reform Act (UMRA)

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for federal agencies to assess the effects of their regulatory actions on state, local and tribal governments and the private sector. Under section 202 of UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for final rules with "Federal mandates" that may result in expenditures to state, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more (adjusted for inflation) in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 of UMRA do not apply when they are inconsistent with applicable law. Moreover, section 205 of UMRA allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly

or uniquely affect small governments, including tribal governments, it must have developed under section 203 of UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory actions with significant federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Under Title II of UMRA, the EPA has determined that this proposed rule does not contain a federal mandate that may result in expenditures that exceed the inflation-adjusted UMRA threshold of \$100 million<sup>59</sup> by state, local, or tribal governments or the private sector in any one year. The proposed revisions to the 2014 FIP would reduce private sector expenditures. Additionally, we do not foresee significant costs (if any) for state and local governments. Thus, because the proposed revisions to the 2014 FIP reduce annual expenditures, this proposed rule is not subject to the requirements of sections 202 or 205 of UMRA. This proposed rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments.

#### F. Executive Order 13132: Federalism

Executive Order 13132, Federalism, 60 revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires the EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism

 $<sup>^{59}</sup>$  Adjusted to 2014 dollars, the UMRA threshold becomes \$152 million.  $^{60}$  64 FR 43255, 43255-43257 (August 10, 1999).

implications."<sup>61</sup> "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."<sup>62</sup> Under Executive Order 13132, the EPA may not issue a regulation "that has federalism implications, that imposes substantial direct compliance costs, . . . and that is not required by statute, unless [the federal government provides the] funds necessary to pay the direct [compliance] costs incurred by the State and local governments," or the EPA consults with state and local officials early in the process of developing the final regulation. The EPA also may not issue a regulation that has federalism implications and that preempts state law unless the agency consults with state and local officials early in the process of developing the final regulation.

This action does not have federalism implications. The proposed FIP revisions will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Thus, Executive Order 13132 does not apply to this action.

G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal

Governments," requires the EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal

<sup>61</sup> 64 FR 43255, 43257.

<sup>62</sup> *Ibid*.

<sup>63</sup> Ibid.

implications. ',64 This proposed rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this rule. However, on September 5, 2018, the EPA did send letters to each of the Wyoming tribes explaining our regional haze proposed FIP revision and offering consultation.<sup>65</sup>

Н. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997). The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of "covered regulatory action" in section 2-202 of the executive order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

Executive Order 13211: Actions Concerning Regulations That Significantly Affect I. Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is not a significant regulatory action under Executive Order 12866.

J. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires federal agencies to evaluate existing technical standards when developing a new

 <sup>&</sup>lt;sup>64</sup> 65 FR 67249, 67250 (November 9, 2000).
 <sup>65</sup> Letters to tribal governments (September 5, 2018).

regulation. Section 12(d) of NTTAA, Public Law 104-113, 12(d) (15 U.S.C. 272 note) directs the EPA to consider and use "voluntary consensus standards" in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by voluntary consensus standards bodies. NTTAA directs the EPA to provide Congress, through OMB, explanations when the agency decides not to use available and applicable voluntary consensus standards.

This action involves technical standards. The EPA has decided to use the applicable monitoring requirements of 40 CFR part 75. Part 75 already incorporates a number of voluntary consensus standards. Consistent with the agency's Performance Based Measurement System (PBMS), part 75 sets forth performance criteria that allow the use of alternative methods to the ones set forth in part 75. The PBMS approach is intended to be more flexible and cost-effective for the regulated community; it is also intended to encourage innovation in analytical technology and improved data quality. At this time, the EPA is not recommending any revisions to part 75. However, the EPA periodically revises the test procedures set forth in part 75. When the EPA revises the test procedures set forth in part 75 in the future, the EPA will address the use of any new voluntary consensus standards that are equivalent. Currently, even if a test procedure is not set forth in part 75, the EPA is not precluding the use of any method, whether it constitutes a voluntary consensus standard or not, as long as it meets the performance criteria specified; however, any alternative methods must be approved through the petition process under 40 CFR 75.66 before they are used.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority

Populations and Low-Income Populations

Executive Order 12898, establishes federal executive policy on environmental justice. 66

Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States.

I certify that the approaches under this proposed rule will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous/tribal populations. As explained previously, the Wyoming Regional Haze FIP, as revised by this action, will result in a significant reduction in emissions compared to current levels. Although this revision will allow an increase in future emissions as compared to the 2014 FIP, the proposed FIP, as a whole, will still result in overall NO<sub>x</sub> and SO<sub>2</sub> reductions compared to those currently allowed. In addition, the area where Laramie River Station is located has not been designated nonattainment for any NAAQS. Thus, the proposed FIP will ensure a significant reduction in NO<sub>x</sub> and SO<sub>2</sub> emissions compared to current levels and will not create a disproportionately high and adverse human health or environmental effect on minority, low-income, or indigenous/tribal populations. The EPA, however, will consider any input received during the public comment period regarding environmental justice considerations.

<sup>66 59</sup> FR 7629 (February 16, 1994).

# List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference,

Intergovernmental relations, Nitrogen dioxide, Particulate matter, Sulfur oxides.

Authority: 42 U.S.C. 7401 et seq.

Dated: October 3, 2018.

# Douglas Benevento,

Regional Administrator,

Region 8.

40 CFR part 52 is proposed to be amended as follows:

## PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

# Subpart ZZ—Wyoming

- 2. Section 52.2620 is amended by revising:
  - a. In paragraph (c), the table entry for 'Section 3' under the centered table heading
    - "Chapter 14. Emission Trading Program Regulations."; and
  - b. In paragraph (e), the table entry for '(20)XX'.

The revisions read as follows:

# § 52.2620 Identification of plan.

\* \* \* \* \*

(c) \* \* \*

Rule No.	Rule title	State effective date	EPA effective date	Final rule/citation date	Comments
* * * * * *	*	•	•		
	Chapter 14	l. Emission Trac	ding Program F	Regulations.	
* * * * * *	*				
Section 3	Sulfur dioxide milestone inventory	2/5/2018	[date 30 days after date of publication in the Federal Register]	[Federal Register citation], [Federal Register date of publication]	

\* \* \* \* \*

(e) \* \* \*

Rule No.	Rule title	State effective date	EPA effective date	Final rule/citation date	Comments	
* * * * * *	*					
(20)XX	Addressing Regional Haze Visibility Protection For The Mandatory Federal Class I Areas Required Under 40 CFR 51.309	4/5/2018	[date 30 days after date of publication in the Federal Register]	[Federal Register citation], [Federal Register date of publication]		
* * * * * *						

## 3. Section 52.2636 is amended by:

- a. Revising paragraphs (a)(2), (b)(4), (b)(12), (c)(1), (c)(1) Table 2, (d)(2) and (d)(3), (e),
  (e)(1)(i), (e)(1)(ii)(A) through (C), (h)(1), and (i)(1); and
- b. Adding paragraphs (b)(13), (d)(4), and (e)(1)(ii)(D).

The revisions and additions read as follows:

## § 52.2636 Implementation plan for regional haze.

- (a) \* \* \*
- (2) This section also applies to each owner and operator of the following emissions units in the State of Wyoming for which EPA disapproved the State's BART determination and issued a  $SO_2$  and/or  $NO_x$  BART Federal Implementation Plan:
- (i) Basin Electric Power Cooperative Laramie River Station Units 1, 2, and 3;
- (ii) PacifiCorp Dave Johnston Unit 3; and
- (iii) PacifiCorp Wyodak Power Plant Unit 1.

\* \* \* \* \*

- (b) \* \* \*
- (4) Continuous emission monitoring system or CEMS means the equipment required by this section to sample, analyze, measure, and provide, by means of readings recorded at least once every 15 minutes (using an automated data acquisition and handling system (DAHS)), a permanent record of  $SO_2$  and/or  $NO_x$  emissions, diluent, or stack gas volumetric flow rate.

\* \* \* \* \*

- (12) SO<sub>2</sub> means sulfur dioxide.
- (13) Unit means any of the units identified in paragraph (a) of this section.
- (c) \* \* \*
- (1) The owners/operators of emissions units subject to this section shall not emit, or cause to be emitted, PM,  $NO_x$ , or  $SO_2$  in excess of the following limitations:

\* \* \* \* \*

# Table 2 to § 52.2636

[Emission limits and required control technologies for BART units for which the EPA disapproved the State's BART determination and implemented a FIP]

Source name/BART unit	NO <sub>x</sub> Required Control Technology	NO <sub>x</sub> emission limit – lb/MMBtu (30- day rolling average)	SO <sub>2</sub> emission limit – lb/MMBtu (averaged annually across both units)
Basin Electric Power Cooperative Laramie River	Selective	$0.18/0.06^4$	
Station/Unit 1 <sup>1</sup>	Catalytic		
	Reduction		0.10
	$(SCR)^2$		0.12
Basin Electric Power Cooperative Laramie River	Selective Non-	0.18/0.15	
Station/Unit 2 <sup>1</sup>	catalytic		
	Reduction		

	(SNCR) <sup>3</sup>		
Basin Electric Power Cooperative Laramie River	Selective Non-	0.18/0.15	N/A
Station/Unit 3 <sup>1</sup>	catalytic		
	Reduction		
	$(SNCR)^3$		
PacifiCorp Dave Johnston Unit 3	N/A	*0.07	N/A
PacifiCorp Wyodak Power Plant/Unit 1	N/A	0.07	N/A

The owners and operators of Laramie River Station Unit 1 shall comply with the NO<sub>x</sub> emission limit of 0.18 lb/MMBtu on [the effective date of the final rule] and ending June 30, 2019. The owners and operators of Laramie River Station Unit 1 shall comply with the NO<sub>x</sub> emission limit of 0.06 lb/MMBtu on July 1, 2019. The owners and operators of the Laramie River Station Units 2 and 3 shall comply with the NO<sub>x</sub> emission limit of 0.18 lb/MMBtu on [the effective date of the final rule] and ending on December 30, 2018. The owners and operators of Laramie River Station Units 2 and 3 shall comply with the NO<sub>x</sub> emission limit of 0.15 lb/MMBtu on December 31, 2018. The owners and operators of Laramie River Station Units 1 and 2 shall comply with the SO<sub>2</sub> emission limit of 0.12 lb/MMBtu averaged annually across the two units on December 31, 2018.

\* \* \* \* \*

(d) \* \* \*

(2) The owners and operators of Laramie River Station Unit 1 shall comply with the NO<sub>x</sub> emission limit of 0.18 lb/MMBtu on [the effective date of the final rule] and ending June 30, 2019. The owners and operators of Laramie River Station Unit 1 shall comply with the NO<sub>x</sub> emission limit of 0.06 lb/MMBtu on July 1, 2019. The owners and operators of the Laramie River Station Units 2 and 3 shall comply with the NO<sub>x</sub> emission limit of 0.18 lb/MMBtu on [the effective date of the final rule] and ending on December 30, 2018. The owners and operators of Laramie River Station Units 2 and 3 shall comply with the NO<sub>x</sub> emission limit of 0.15 lb/MMBtu on December 31, 2018. The owners and operators of Laramie River Station Units 1 and 2 shall

<sup>&</sup>lt;sup>2</sup> By July 1, 2019.

<sup>&</sup>lt;sup>3</sup> By December 30, 2018.

 $<sup>^4</sup>$  These limits are in addition to the  $NO_x$  emission limit for Laramie River Station Unit 1 of 0.07 MMBtu on a 30-day rolling average.

<sup>\*(</sup>or 0.28 and shut-down by December 31, 2027).

comply with the  $SO_2$  emission limit of 0.12 lb/MMBtu averaged annually across the two units on December 31, 2018.

- (3) The owners and operators of the other BART sources subject to this section shall comply with the emissions limitations and other requirements of this section by March 4, 2019.
- (4) Compliance alternatives for PacifiCorp Dave Johnston Unit 3. (i) The owners and operators of PacifiCorp Dave Johnston Unit 3 will meet a NO<sub>x</sub> emission limit of 0.07 lb/MMBtu (30-day rolling average) by March 4, 2019; or
- (ii) Alternatively, the owners and operators of PacifiCorp Dave Johnston Unit 3 will permanently cease operation of this unit on or before December 31, 2027.
- (e) Compliance determinations for  $SO_2$  and  $NO_x$ .
- (1) \* \* \*
- (i) *CEMS*. At all times after the earliest compliance date specified in paragraph (d) of this section, the owner/operator of each unit shall maintain, calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR part 75, to accurately measure  $SO_2$  and/or  $NO_x$ , diluent, and stack gas volumetric flow rate from each unit. The CEMS shall be used to determine compliance with the emission limitations in paragraph (c) of this section for each unit. (ii) \* \* \*
- (A) For any hour in which fuel is combusted in a unit, the owner/operator of each unit shall calculate the hourly average NO<sub>x</sub> emission rates in lb/MMBtu at the CEMS in accordance with the requirements of 40 CFR part 75. At the end of each operating day, the owner/operator shall calculate and record a new 30-day rolling average emission rate in lb/MMBtu from the arithmetic average of all valid hourly emission rates from the CEMS for the current operating day and the previous 29 successive operating days.

- (B) At the end of each calendar year, the owner/operator shall calculate the annual average SO<sub>2</sub> emission rate in lb/MMBtu across Laramie River Station Units 1 and 2 as the sum of the SO<sub>2</sub> annual mass emissions (pounds) divided by the sum of the annual heat inputs (MMBtu). For Laramie River Station Units 1 and 2, the owner/operator shall calculate the annual mass emissions for SO<sub>2</sub> and the annual heat input in accordance with 40 CFR part 75 for each unit.

  (C) An hourly average SO<sub>2</sub> and/or NO<sub>x</sub> emission rate in lb/MMBtu is valid only if the minimum number of data points, as specified in 40 CFR part 75, is acquired by both the pollutant concentration monitor (SO<sub>2</sub> and/or NO<sub>x</sub>) and the diluent monitor (O<sub>2</sub> or CO<sub>2</sub>).
- (D) Data reported to meet the requirements of this section shall not include data substituted using the missing data substitution procedures of subpart D of 40 CFR part 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR part 75.

\* \* \* \* \*

- (h) \* \* \*
- (1) The owner/operator of each unit shall submit quarterly excess emissions reports for  $SO_2$  and/or  $NO_x$  BART units no later than the  $30^{th}$  day following the end of each calendar quarter. Excess emissions means emissions that exceed the emissions limits specified in paragraph (c) of this section. The reports shall include the magnitude, date(s), and duration of each period of excess emissions, specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the unit, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.

\* \* \* \* \*

(i) \* \* \*

(1) The owner/operator shall promptly submit notification of commencement of construction of any equipment which is being constructed to comply with the  $SO_2$  and/or  $NO_x$  emission limits in

paragraph (c) of this section.

\* \* \* \* \*

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